

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/20076

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : G09F 17/00 US CL : 116/173; 70/18 According to International Patent Classification (IPC) or to both national classification and IPC																																			
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 116/173,174,175,28R,209; 70/18,58; 40/218,602,591,607.01; 248/511,219 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EAST Search																																			
C. DOCUMENTS CONSIDERED TO BE RELEVANT <table border="1"> <thead> <tr> <th>Category *</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>US 2,377,219 A (Ellis) 29 May 1945 (29.05.1945), Figs.1-2.</td> <td>1, 3, 6, 10-11, 16-18, 22, 24</td> </tr> <tr> <td>---</td> <td></td> <td>-----</td> </tr> <tr> <td>Y</td> <td></td> <td>2,12-15, 19-21</td> </tr> <tr> <td>Y</td> <td>WO 87/00953 A (Sundberg) 12 February 1987 (12.02.1987), Fig. 2.</td> <td>2, 19-20</td> </tr> <tr> <td>Y,P</td> <td>US 2003/0193804 A1 (Schroeder) 16 October 2003 (16.10.2003), Fig.1.</td> <td>21</td> </tr> <tr> <td>Y</td> <td>US 1,987,281 A (Briggs) 08 January 1935 (08.01.1935), Fig. 1.</td> <td>12-15</td> </tr> <tr> <td>X</td> <td>US 1,298,550 A (Newell) 25 March 1919 (25.03.1919), Figs. 1-5.</td> <td>1, 4-5, 9, 22-23</td> </tr> <tr> <td>X</td> <td>US 4,889,321 A (Burns) 26 December 1989 (26.12.1989), Fig.1.</td> <td>26-30</td> </tr> <tr> <td>A</td> <td>US 5,335,621 A (Willis et al.) 09 August 1994 (09.08.1994), Figs. 2-4.</td> <td>1,22</td> </tr> <tr> <td>A</td> <td>US 1,338,210 A (Buckley) 27 April 1920 (27.04.1920), Fig. 1.</td> <td>1,22</td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 2,377,219 A (Ellis) 29 May 1945 (29.05.1945), Figs.1-2.	1, 3, 6, 10-11, 16-18, 22, 24	---		-----	Y		2,12-15, 19-21	Y	WO 87/00953 A (Sundberg) 12 February 1987 (12.02.1987), Fig. 2.	2, 19-20	Y,P	US 2003/0193804 A1 (Schroeder) 16 October 2003 (16.10.2003), Fig.1.	21	Y	US 1,987,281 A (Briggs) 08 January 1935 (08.01.1935), Fig. 1.	12-15	X	US 1,298,550 A (Newell) 25 March 1919 (25.03.1919), Figs. 1-5.	1, 4-5, 9, 22-23	X	US 4,889,321 A (Burns) 26 December 1989 (26.12.1989), Fig.1.	26-30	A	US 5,335,621 A (Willis et al.) 09 August 1994 (09.08.1994), Figs. 2-4.	1,22	A	US 1,338,210 A (Buckley) 27 April 1920 (27.04.1920), Fig. 1.	1,22
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Date of the actual completion of the international search 09 December 2004 (09.12.2004)		Date of mailing of the international search report 15 FEB 2005																																	
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer Diego Gutierrez <i>James R. Matthews</i> Telephone No. (571) 272-2245																																	